Public Portal

EDRN Information System Architecture

Sean Kelly

Overview

What it is
How it works
Current issues
Future directions
Summary



testing cancer in its earliest stages and for cancer risk.

- Scientific Components
- For Public, Patients, and Advocates
- Collaborative Opportunities
- For Researchers

Collaborative



http://edrn.nci.nih.gov/ http://cancer.gov/edrn/

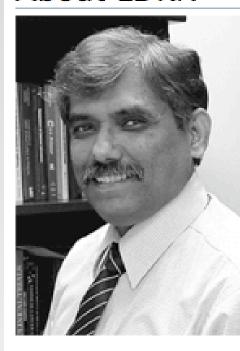
EDRN members partners prospective members

general public cancer sufferers patient advocates

About EDRN







Greetings!

In the 19th century, pathologists used the newly invented microscope to investigate the nature of cancer as well as other diseases. Along with improvements in tissue processing, the microscope took pathologists from gross anatomy to microscopic analysis, which eventually led to a new pathology. This new pathology culminated in Virchow's concept that the fundamental changes in disease can be attributed to alterations in the cells of the body. The application of molecular technologies with minimally intrusive surgical techniques has laid the foundation for a revolutionary leap in the science of screening, early diagnosis and target-based therapy for cancer. Fueled by the discovery of cancer-specific biomarkers, and

aided by pathological improvements, molecular-based tests are in the not-too-distant future to perform noninvasive diagnosis on patients. The NCI's Early Detection Research Network (EDRN) is committed to make molecular diagnostics a reality that will allow physicians to provide individualized treatment to cancer patients. The EDRN is committed to provide up-to-date information on biomarker research through this Website and scientific publications.

> Sudhir Srivastava Chief, Cancer Biomarkers Research Group Chief, Cancer Biomarkers Research Group Sudhir Srivastava

information on biomarker research through this Website and scientific publications.

Objectives





The intents of the Early Detection Research Network.

The objectives of EDRN include:

- Development and testing of promising biomarkers or technologies for early detection of cancer
- Evaluation of promising, analytically proven biomarkers or technologies
- Collaboration among academic and industrial leaders in molecular biology, molecular genetics, clinical oncology, computer science, public health and clinical application for early cancer detection
- Collaboration and rapid dissemination of information among awardees
- Collaboration and rapid dissemination of information among awardees

Core Funds Associate Member(A)	
▼Site ID	
262 Beer, David, Ph.D.	University of Michigan Medical School
199 Fedarko, Neal S., Ph.D.	Johns Hopkins School of Medicine
311 Gaston, Sandra M., Ph.D.	Beth Israel Deaconess Medical Center
261 Gite, Sadanand, Ph.D.	Ambergen, Inc.
225 Goldman, Radoslav, Ph.D.	Lombardi Comprehensive Cancer Center
260 Lubman, David, Ph.D.	University of Michigan Medical School
266 Mor, Gil, M.D., Ph.D.	Yale University
Weiss, Robert Henry, M.D., M.S.	University of California, Davis
Zeng, Gang, Ph.D.	University of California, Los Angeles
Core Funds Associate Member(B)	
Core Funds Associate Member(B) Site ID	
Core Funds Associate Member(B) Site ID Adam, Bao-Ling, Ph.D.	Medical College of Georgia
Core Funds Associate Member(B) Site ID	Medical College of Georgia The Male Health Centre
Core Funds Associate Member(B) Site ID 127 Adam, Bao-Ling, Ph.D. 298 Barkin, Jack, M.D.	
Core Funds Associate Member(B) ▼Site ID 127 <u>Adam, Bao-Ling, Ph.D.</u>	The Male Health Centre
Core Funds Associate Member(B) Site ID Adam, Bao-Ling, Ph.D. Barkin, Jack, M.D. Basler, Joseph W., M.D., Ph.D. Befeler, Alex, M.D.	The Male Health Centre University of Texas Health Science Center San Antonio Saint Louis University
Core Funds Associate Member(B) Site ID 127 Adam, Bao-Ling, Ph.D. 298 Barkin, Jack, M.D. 124 Basler, Joseph W., M.D., Ph.D.	The Male Health Centre University of Texas Health Science Center San Antonio
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EDRN Publications

15 items are listed for National Institute of Standards and Technology (Assoc. Member) (publication type: all)

Manuscripts/Published:

Journal:

Atha DH, Miller K, Sanow AD, Xu J, Hess JL, Wu OC, Wang W, Srivastava S, Highsmith WE. High-throughput TRAP/PCR analysis of telomerase using capillary electrophoresis. (Abstract) <u>American Journal of Human Genetics</u> 2002; 71(2): 230.

Barker PE. Cell and DNA standards for medical genetics laboratories. <u>Journal of the Association of Genetic Technologists</u> 2002; 28(2): 47-49.

Barker PE, Atha DH, Hocker D, Markowitz M, Srivastava S, Wang W, O'Connell, CD. NIST-NCI biomarker validation laboratory: NIST Collaborates with Cancer Biomarkers Group. (Abstract) <u>Biomaterials</u> 2001; 24(3): 16.

Barker PE, Hocker D, Pinsky P, Wang W, Srivastava S, Wu X, Spitz M. Estimates of consensus in cell selection and scoring of FISH data. (Abstract) <u>American Journal of Human Genetics</u> 2002; 71(2): 222.

Barker PE, Watson MS, Ticehurst JR, Colbert JC, O'Connell CD. NIST physical standards for DNA-based medical testing. <u>Journal of Clinical Laboratory Analysis</u> 2001; 16: 5-10.

Srinivas P, Barker PE, Srivastava S. Nanotechnology in Early Cancer Detection. (NIST Workshop Report). <u>Laboratory Investigation</u> 2002; 82(5): 657-662.

Presentation:

Atha DH, Miller K, Xu J, Zerit H, Wu OC, Sanow AD, Wang W, Srinivasan S, Highsmith WE. High-Throughput Analysis of Telomerase by Capillary Electrophoresis.. 12th Annual Frederick Conference on Capillary Electrophoresis, 2001 October 15, Frederick, MD.

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Atha DH, Miller K, Xu J, Zerit H, Wu OC, Sanow AD, Wang W, Srinivasan S, Highsmith WE . High-Throughput Analysis of Telomerase by Capillary Electrophoresis.. 12th Annual Frederick Conference on Capillary Electrophoresis, 2001 October 15, Frederick, MD.

82(5): 657-662.

Snnivas P, Barker PE, Snvastava S. Nanotechnology in Early Cancer Detection. (NIST Workshop Report). Laboratory investigation 2002;

EDRN Protocols

Please select a protocol name to get its information in detail.

Protocol Name	Protocol Document	Protocol ID
Andogenic Activity and the Association with Ovarian Cancer		Unregistered
Assessment of Clinical Potential of Digital SNP Analysis		Unregistered
Barrett's Esophogus Methylation Profiles		Unregistered
Biomarker Dev Lab At Moffitt Supplement		Unregistered
Biomarker Development Laboratory		95
Biomarkers in Familial Multiple Myeloma		139
Body Fluids as a Source of Diagnostic Biomarkers		76
Body Fluids as a Source of Diagnostic Biomarkers: Breast		68
Body Fluids as a Source of Diagnostic Biomarkers: Prostate		67
Breast Ductal Lavage Fluid Specimen Bank		Unregistered
Breast tissue array		71
Clinical Validation of Molecular Signatures of Cervical Neoplasia		Unregistered
CLUE Studies: Evaluating Biomarkers of Carcinogenesis		59
Collaborative study on SELDI biomarker discovery and serum protein profiling of lung cancers		Unregistered
DCP Validation Study	DCP Protocol version 1.6 (clean)	Unregistered
Detecting breast cancer protein signatures in body fluid		Unregistered
Detecting Breast Cancer Signatures in Body Fluids		73
Detection of Bladder CA by Microsatellite Analysis (MSA)	MSA Protocol version 1.6 (clean)	108
Detection of Bladder CA by Microsatellite Analysis (MSA)	MSA Protocol version 1.6 (clean)	108
Detecting Breast Cancer Signatures in Body Fluids		73
		Unregistered

Notices





Funding opportunities through Notices.

Current Notices

Announcement of the NCI Early Detection Research Network Title:

(EDRN) Program for Rapid, Independent Diagnostic Evaluation (PRIDE)

for Cancer Biomarkers

Notice Number: NOT-CA-07-003

Release Date: October 20, 2006

Release Date: October 20, 2006

Notice Number:

Resources





Informatics, procedural, and other resources for EDRN members.

- EDRN Informatics (QuickTime video)
- Find EDRN Protocols
- Common data elements
- Data Element Search
- Specimen Reference Sets
- Standard Operating Procedures
 - Assays
 - Biological Specimens
- BEDRN Resource Network Exchange

Real-time search for specimens across participating EDRN member sites. Login required.

- ERNE Summary Inventory
- Search for Biological Specimens

Enables you to search for specimens within the EDRN by organ site, specimen type, and principal investigator. Login required.

- Biomarkers Knowledge Environment (Large PDF)
- Biomarkers Reference Laboratories

The Biomarkers Reference Laboratories provide validation and other assistance with biomarkers research.

research,

The Biomarkers Reference Laboratories provide validation and other assistance with biomarkers

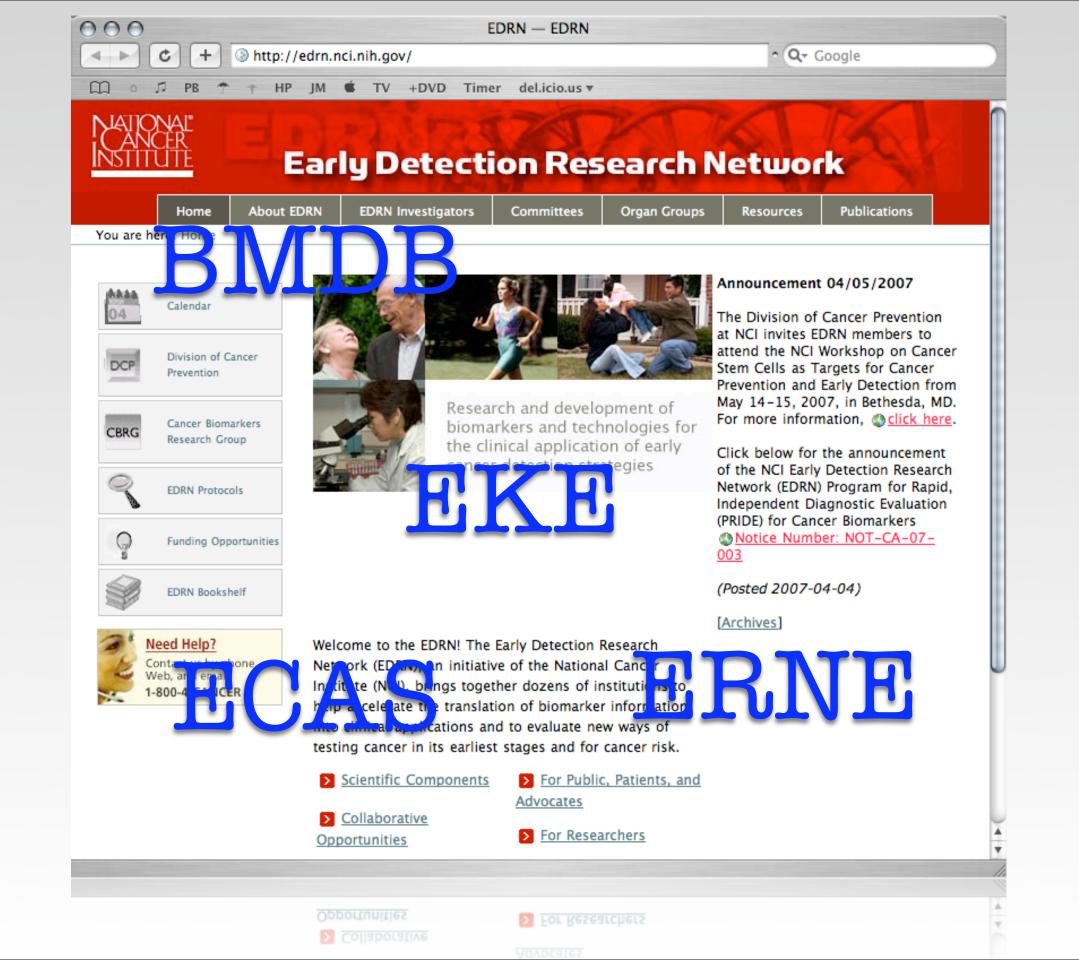


testing cancer in its earliest stages and for cancer risk.

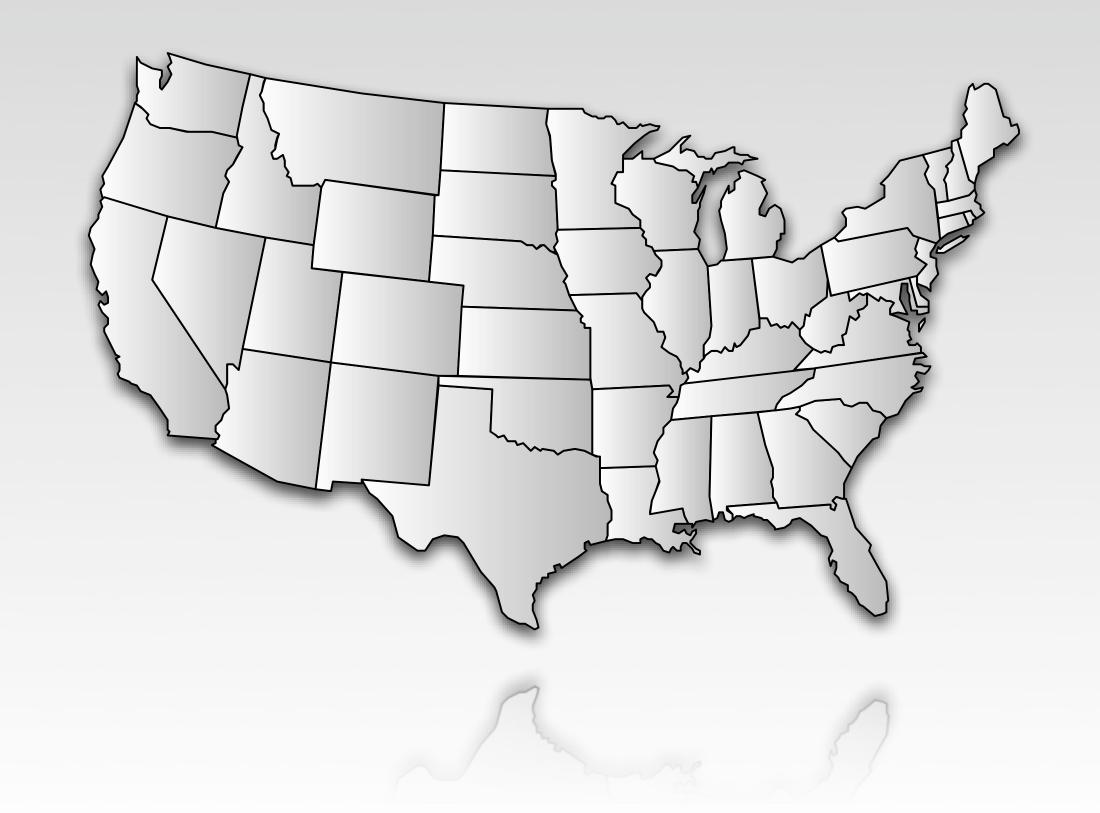
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- For Public, Patients, and Advocates
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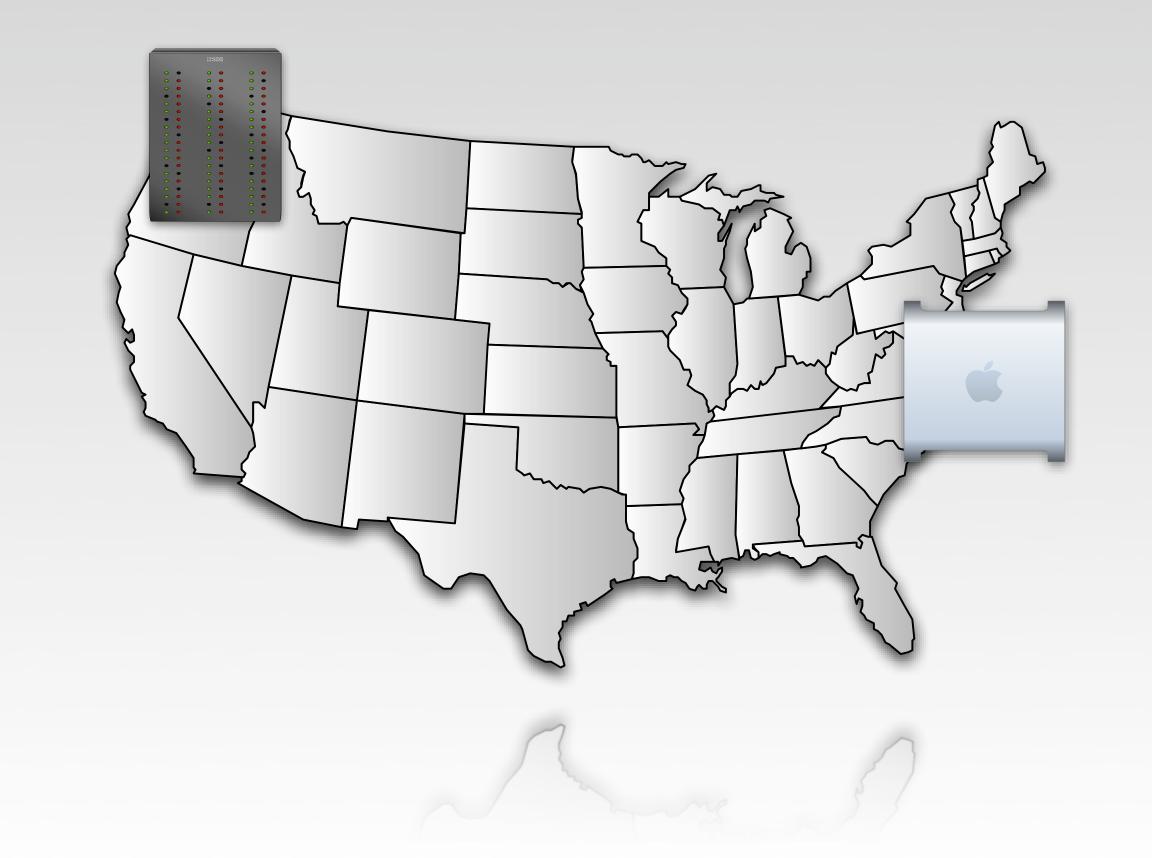
Collaborative



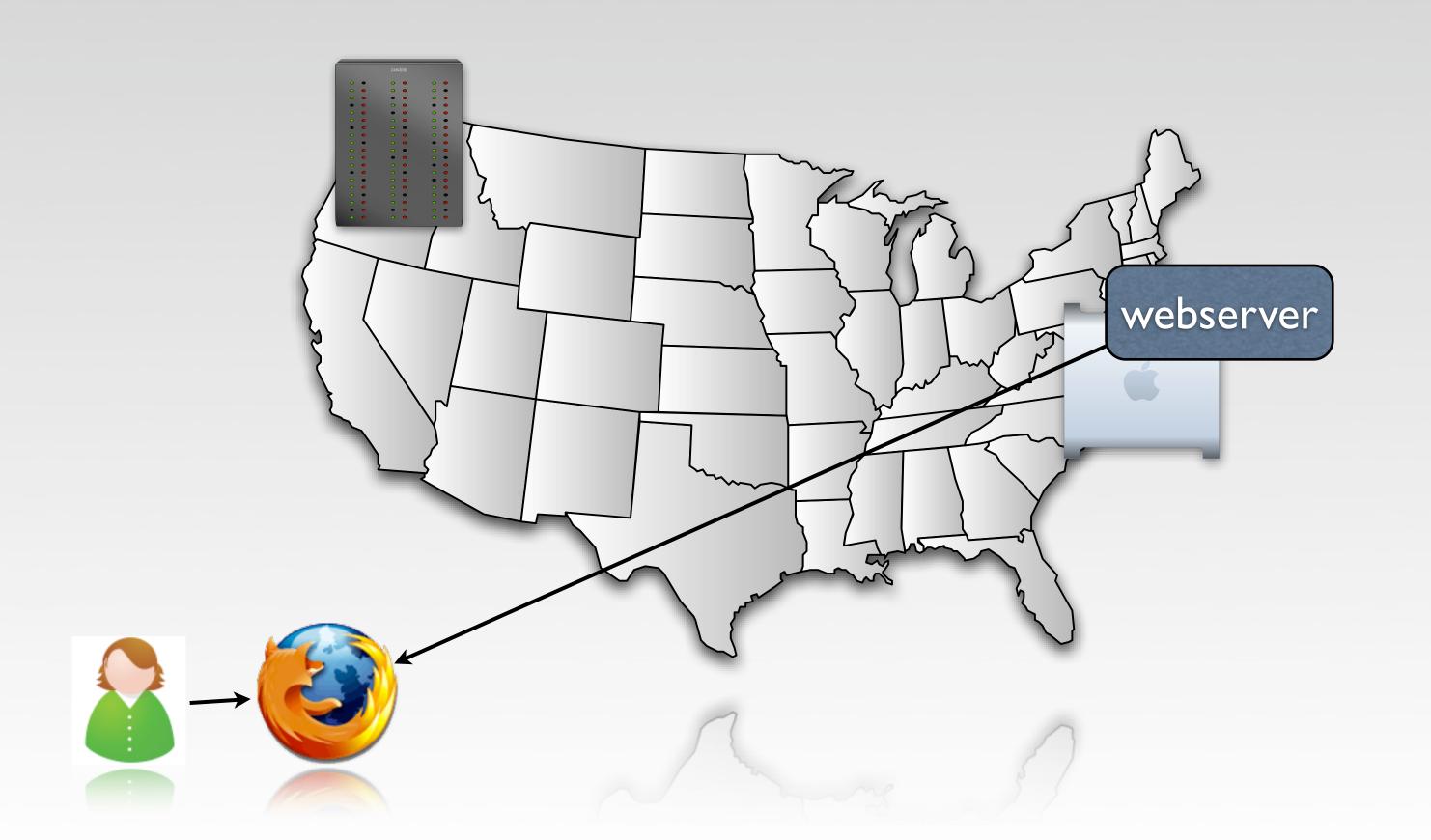


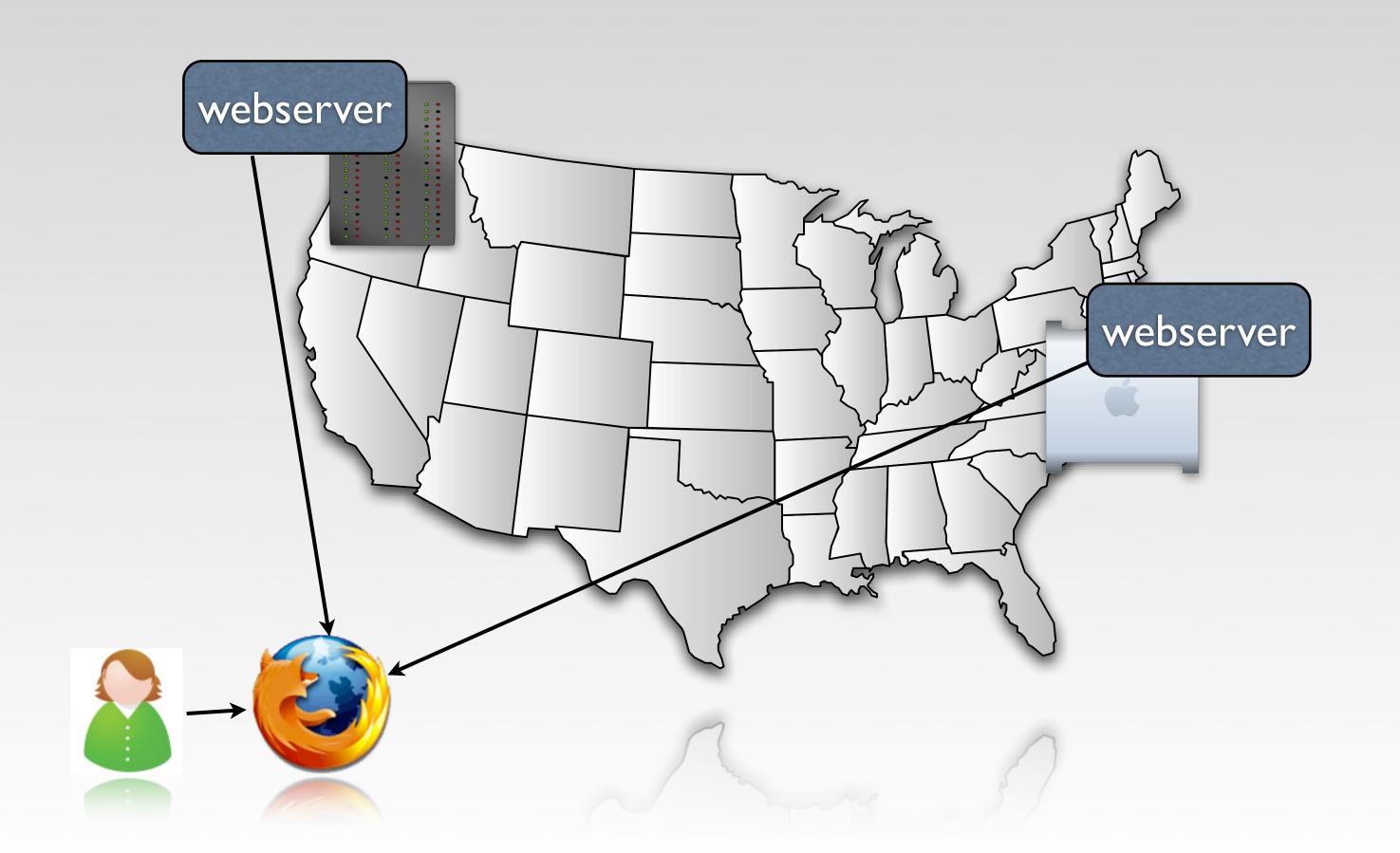
architecture

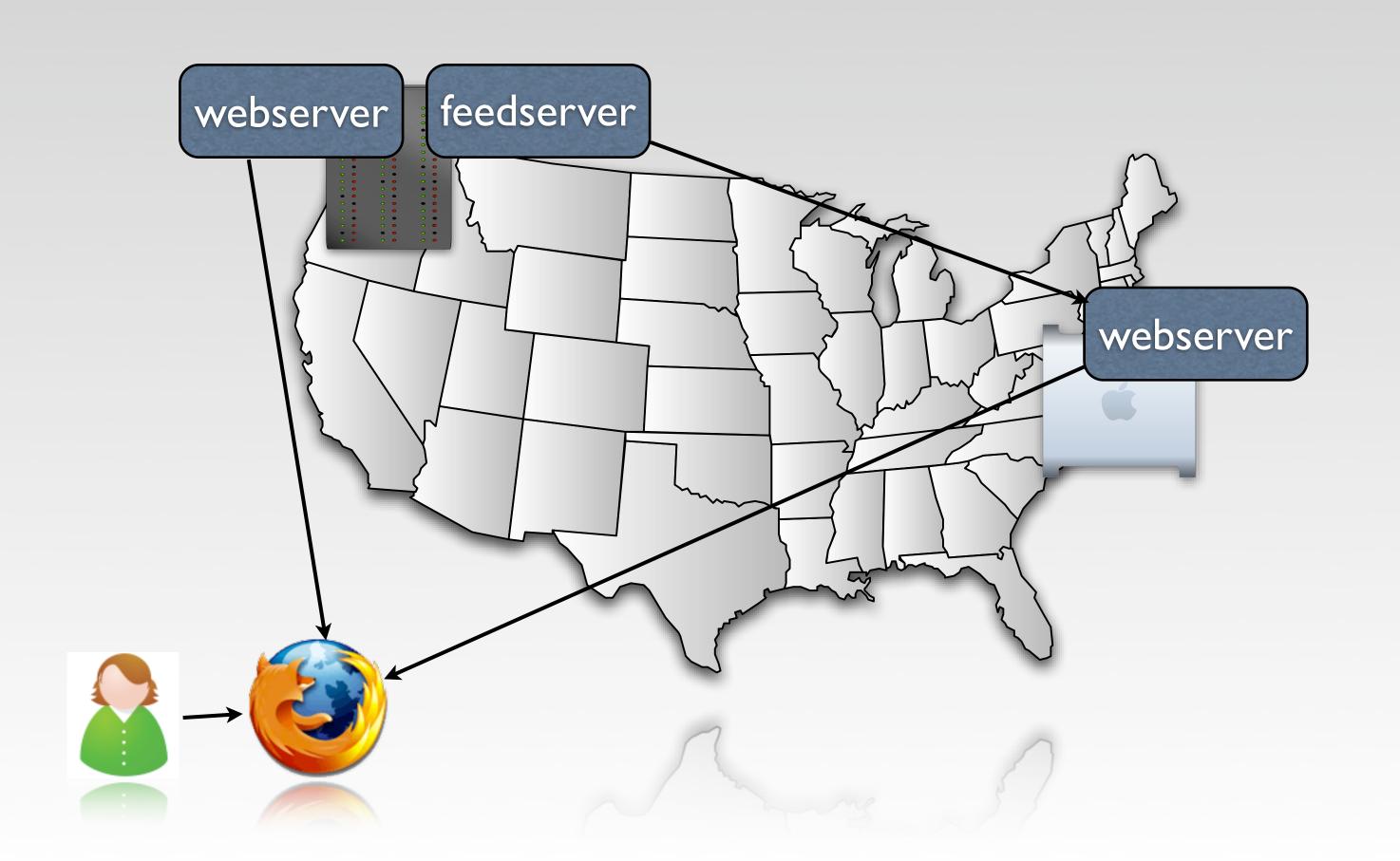












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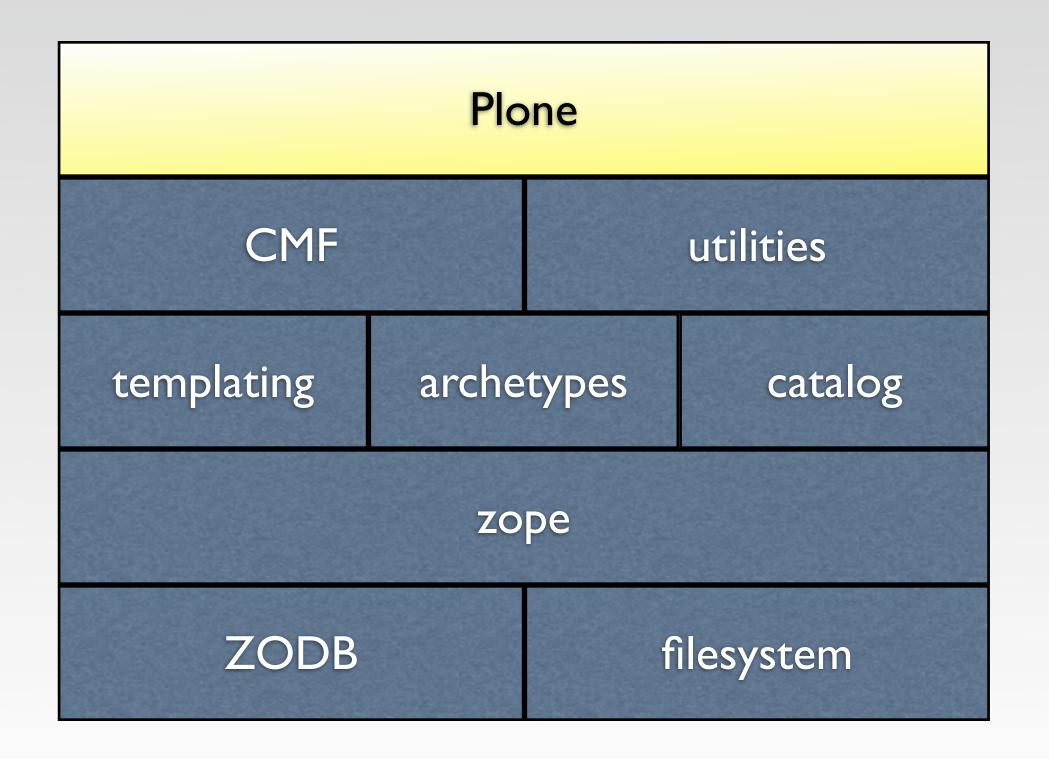


"batteries included"

only serious open source contender

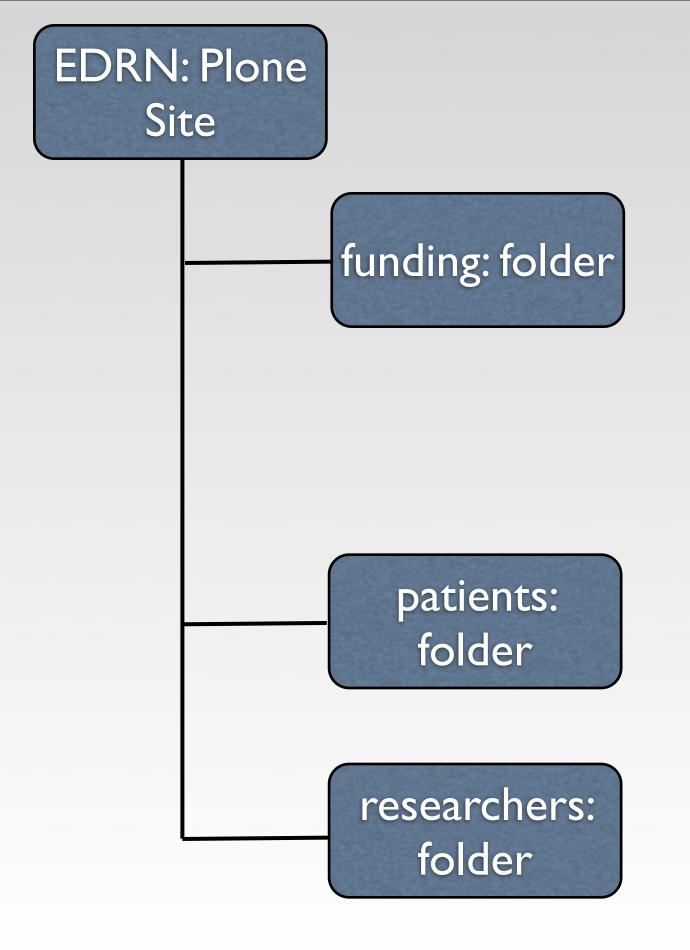
zope
ZODB filesystem

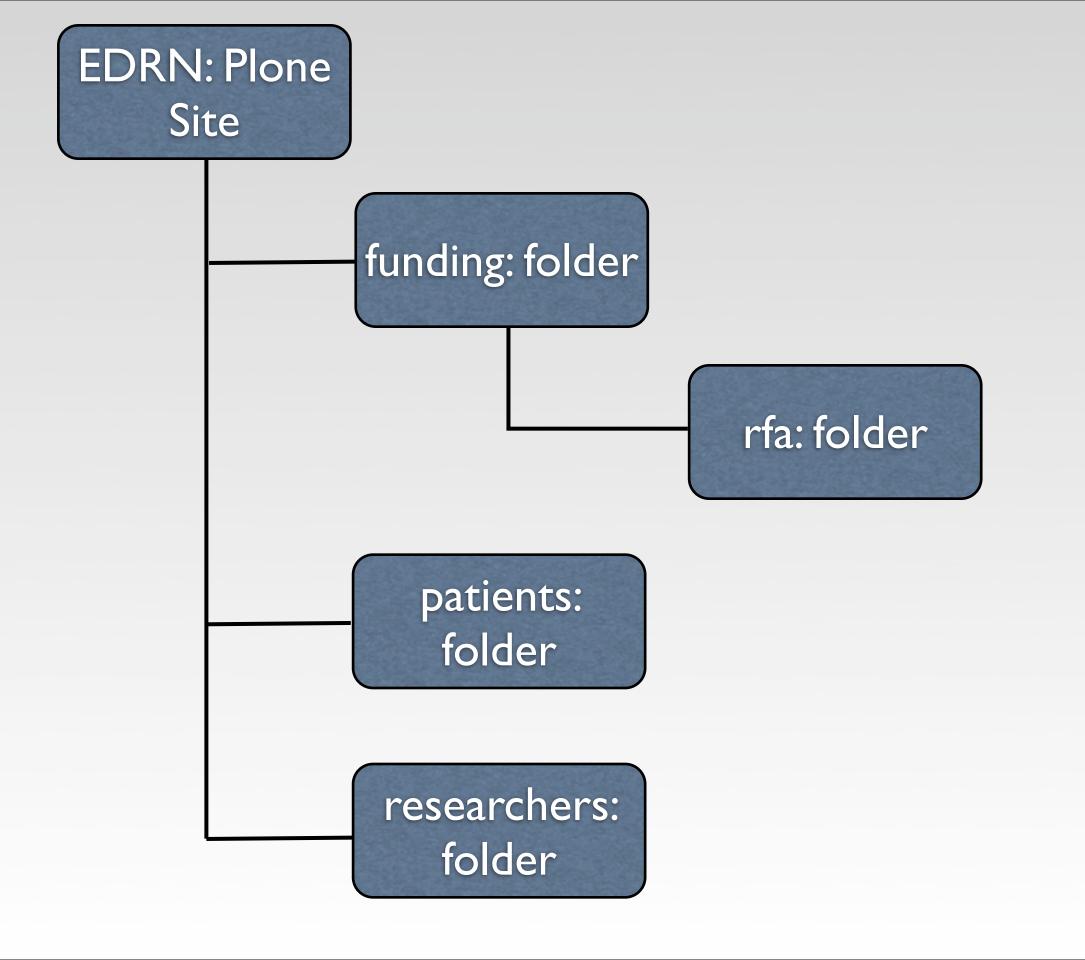
CMF utilities templating archetypes catalog zope filesystem ZODB

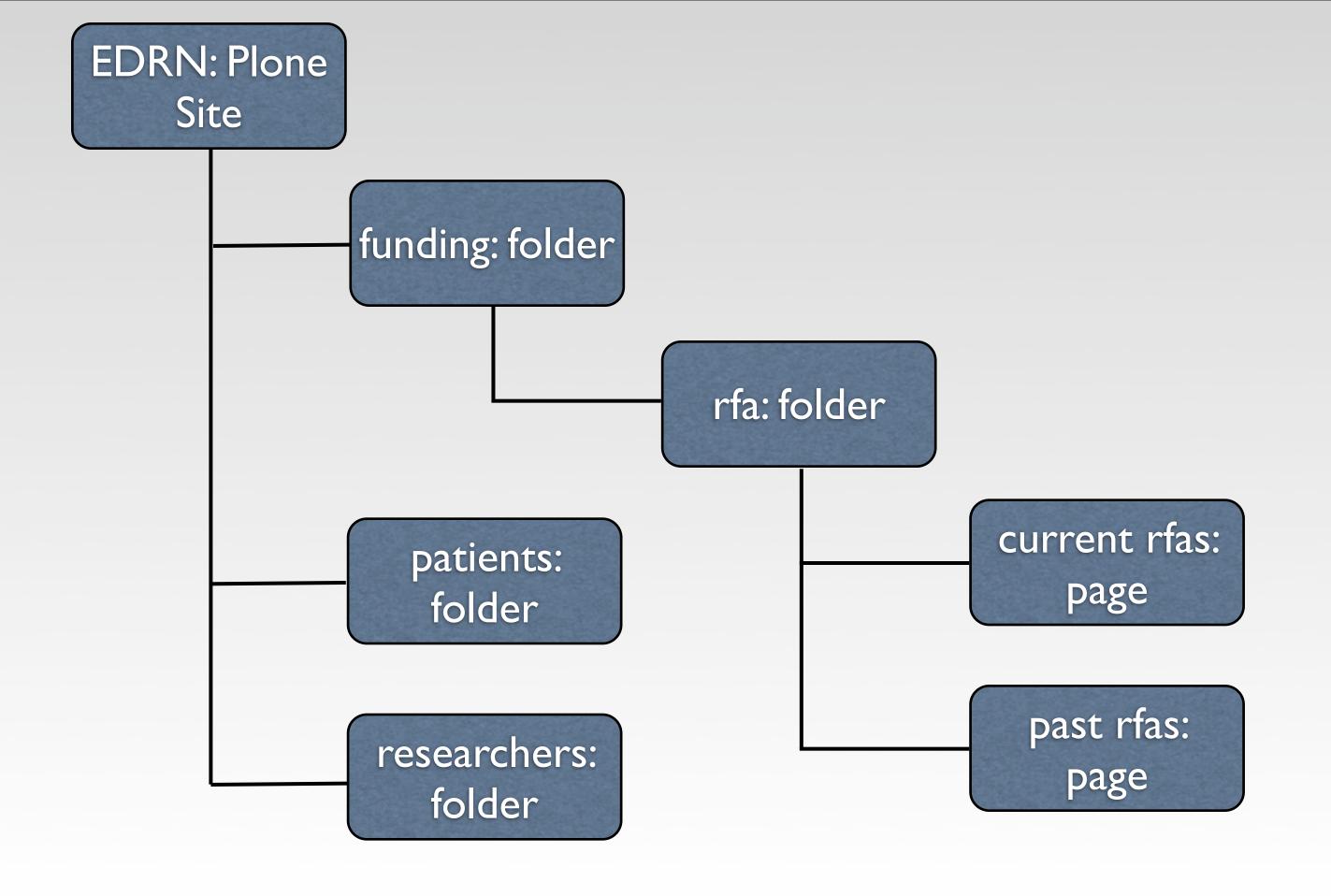


object publishing

EDRN: Plone Site







objects can be rendered invoked stored retrieved

over HTTP FTP ICP XIVIL-RPC WebDAV

with robust security

```
vulnerabilities since July 2005: PHP † 80%
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Mambo 1 194%

Drupal † 150%

Joomla 1 270%

Perl 18%

Zope 1 6%

Plone = 0%

DMCC pages

frame trick

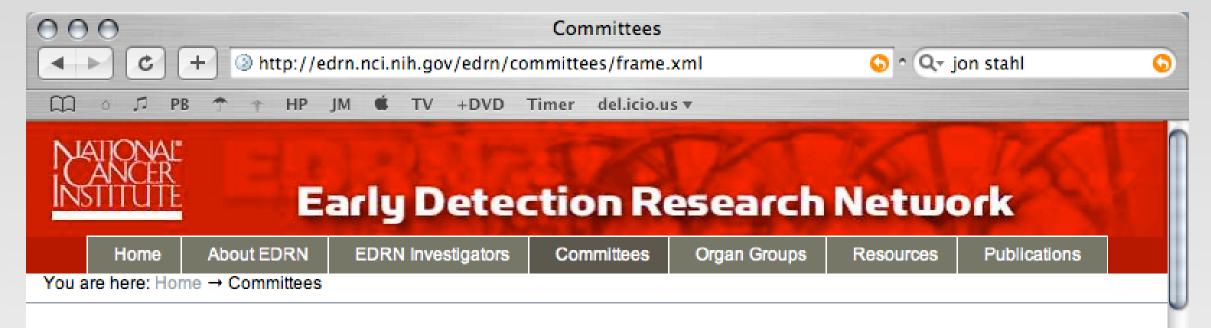
page contains two frames

top frame

page generated by DMCC set to 99% height

bottom frame

set to "about:blank" 1% height



- Steering Committee (SC)
- · Executive Committee (EC)
- Network Consulting Team (NCT)

Subcommittees

Subcommittees are the policy-making Working Groups of the EDRN and report to the SC when requested by the Chair. Subcommittees
meet twice a year in conjunction with the SC business meetings. Conference calls are made any time on the recommendation of the
Chair of either the SC or Subcommittees. Formal meetings between the semiannual meetings require approval by the Chair of the SC.



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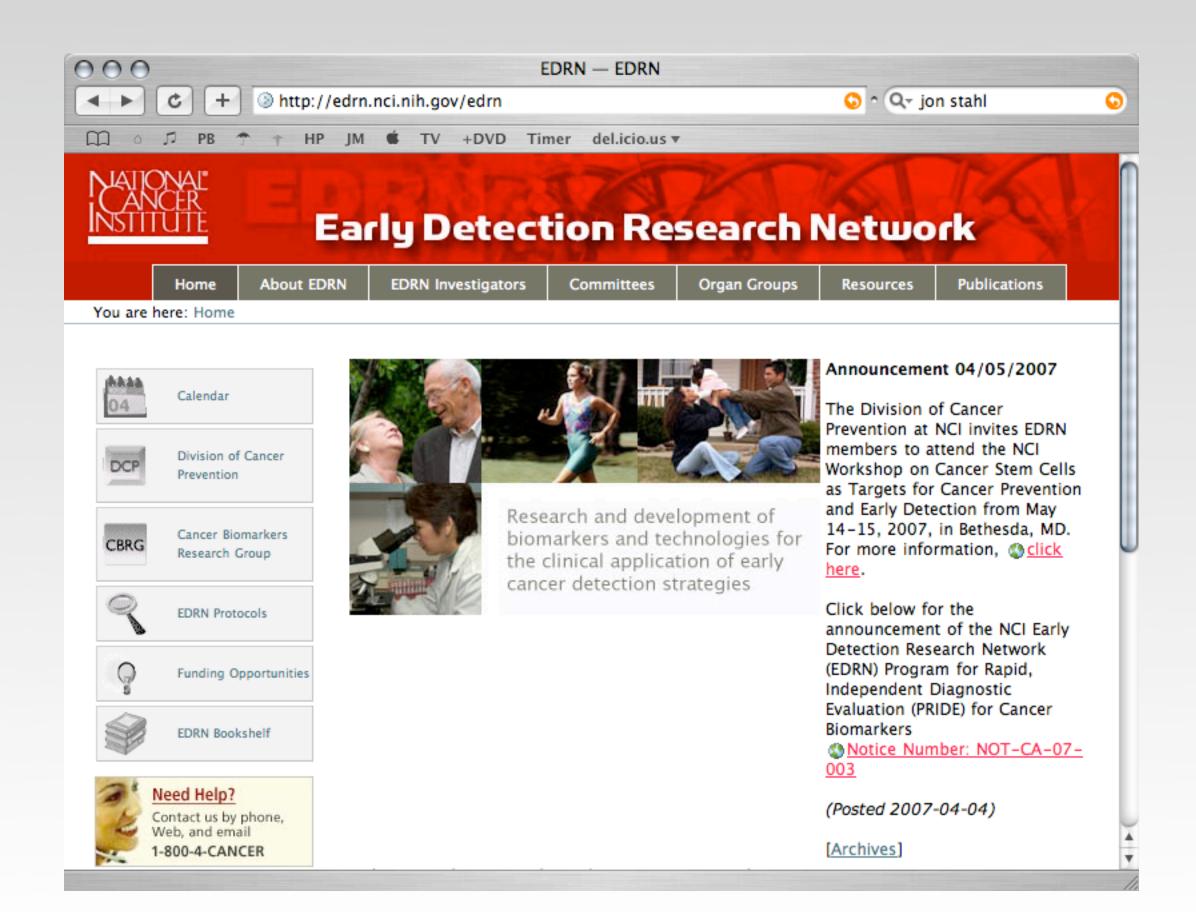
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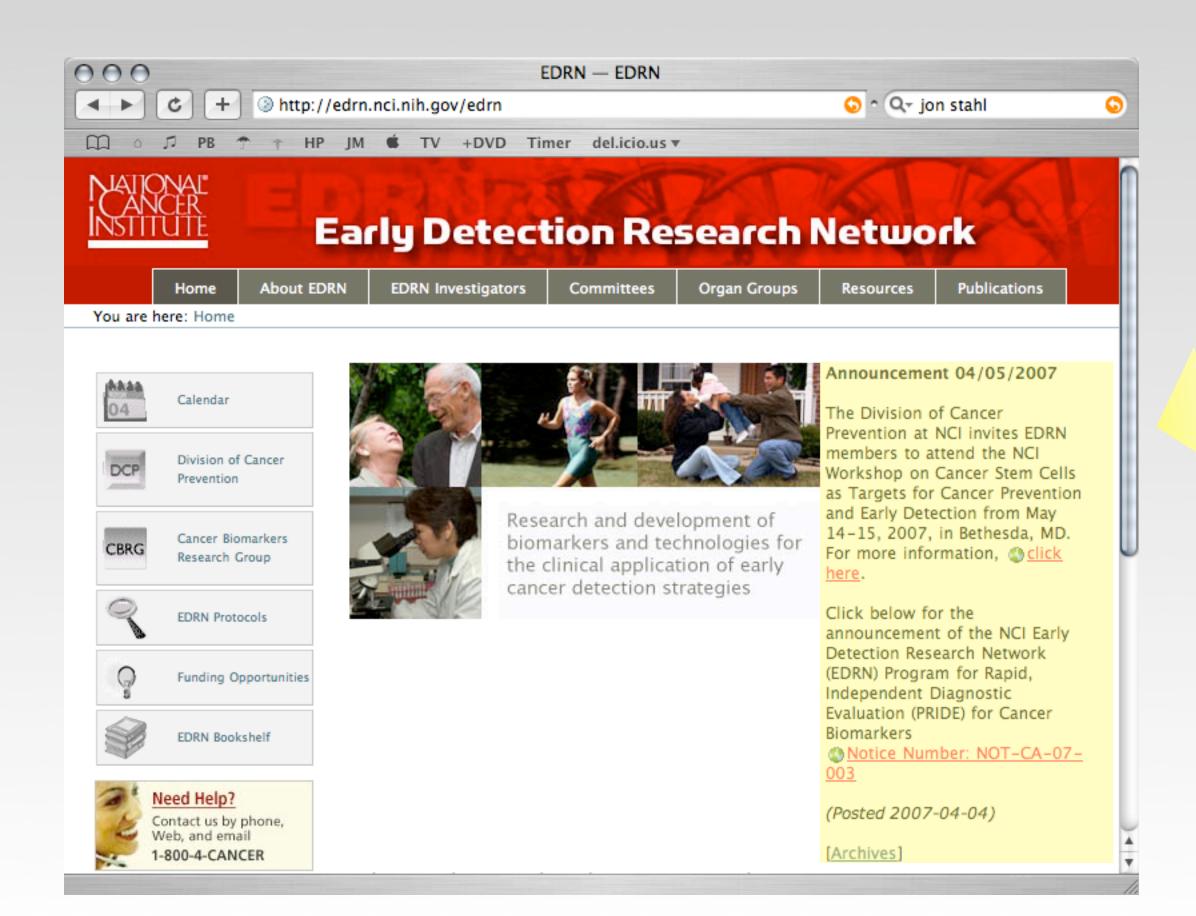
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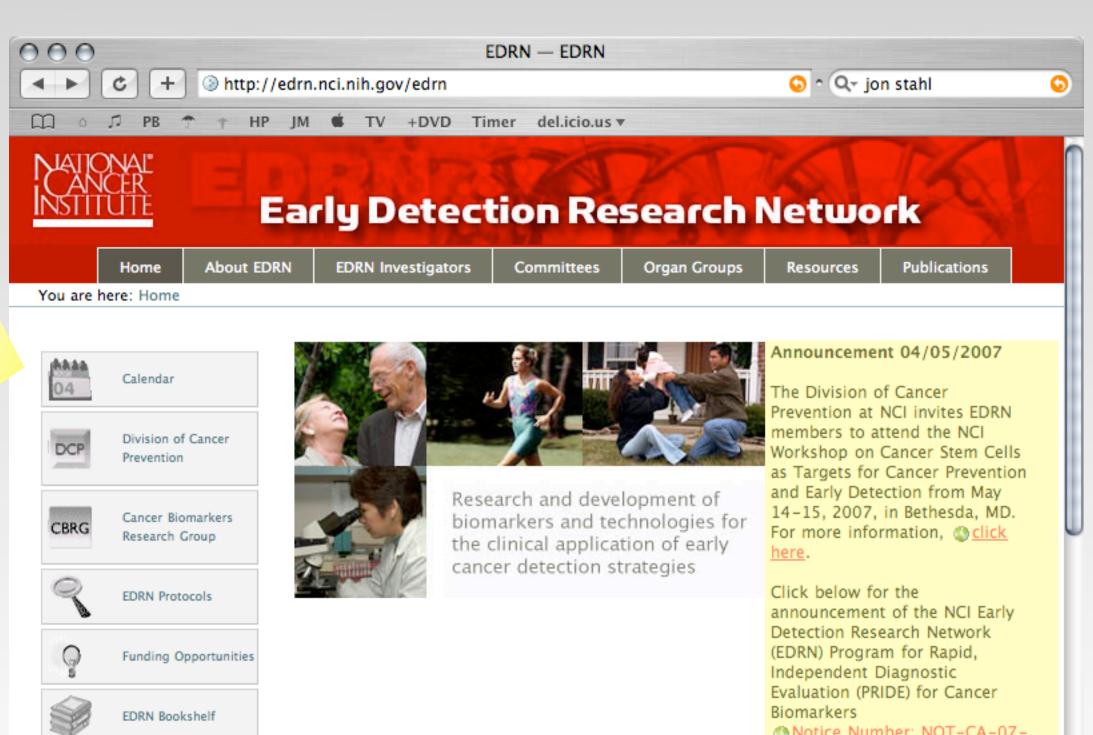
Really Simple Syndication

syndicate news feeds

announcements "calendar" page







Need Help?

Contact us by phone, Web, and email 1-800-4-CANCER

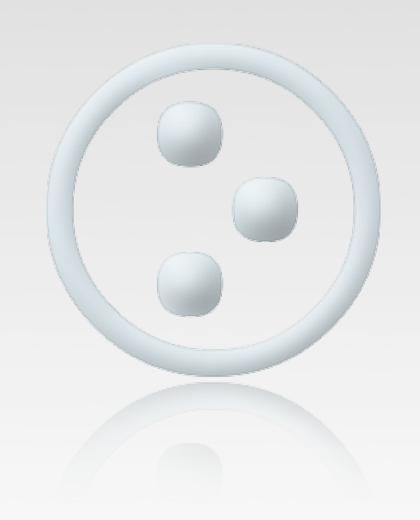
Notice Number: NOT-CA-07-003

(Posted 2007-04-04)

[Archives]

issues

slow





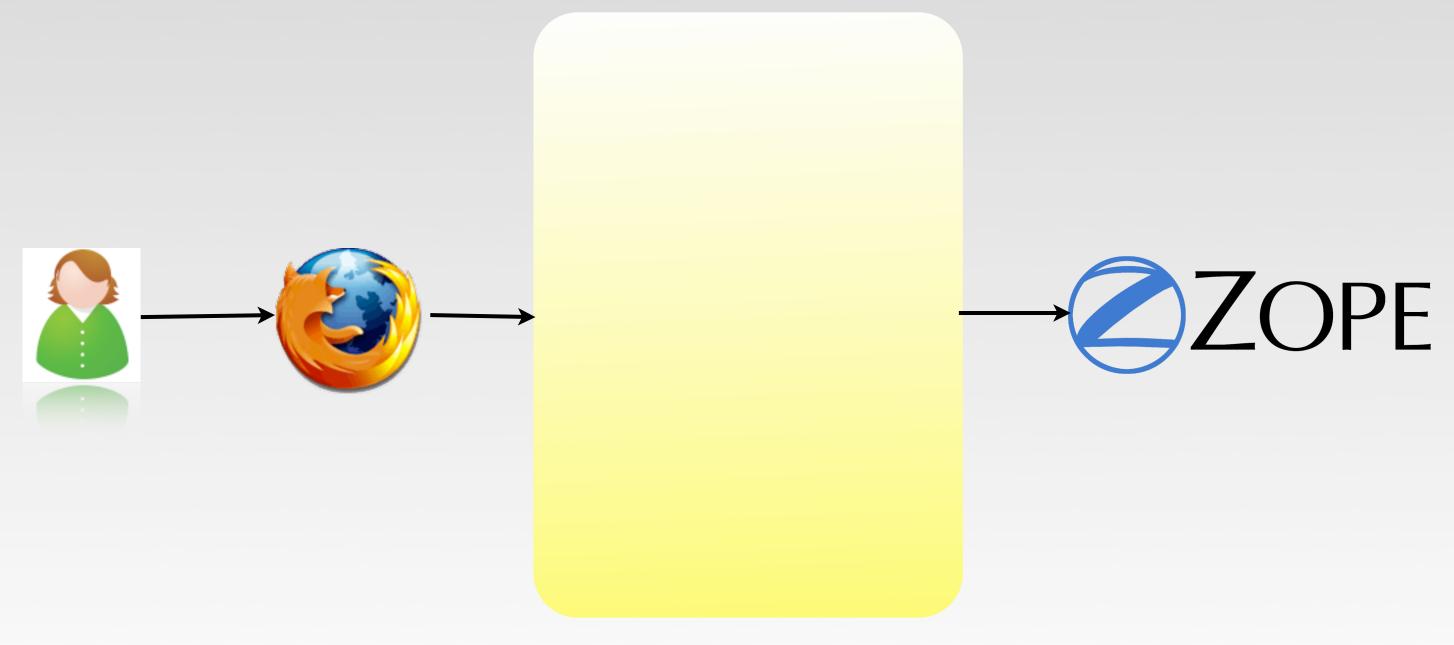
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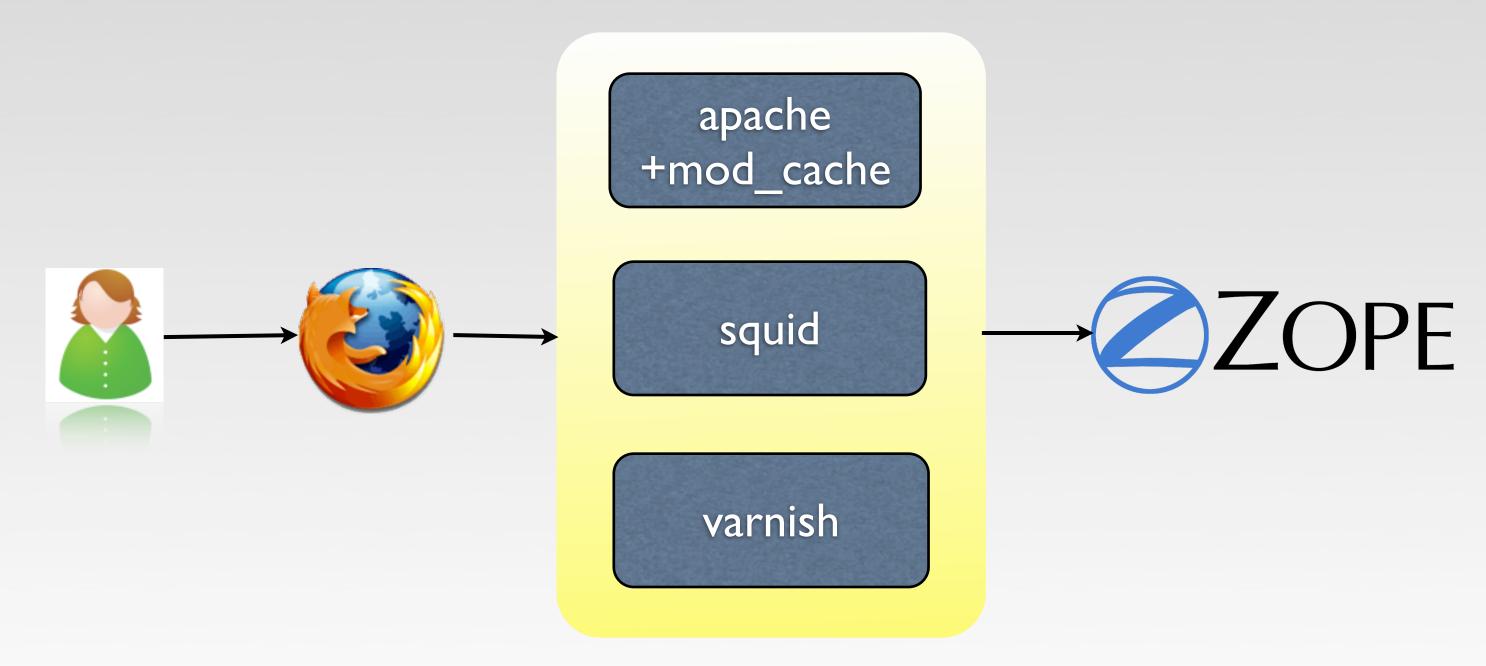
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accelerator



accelerator



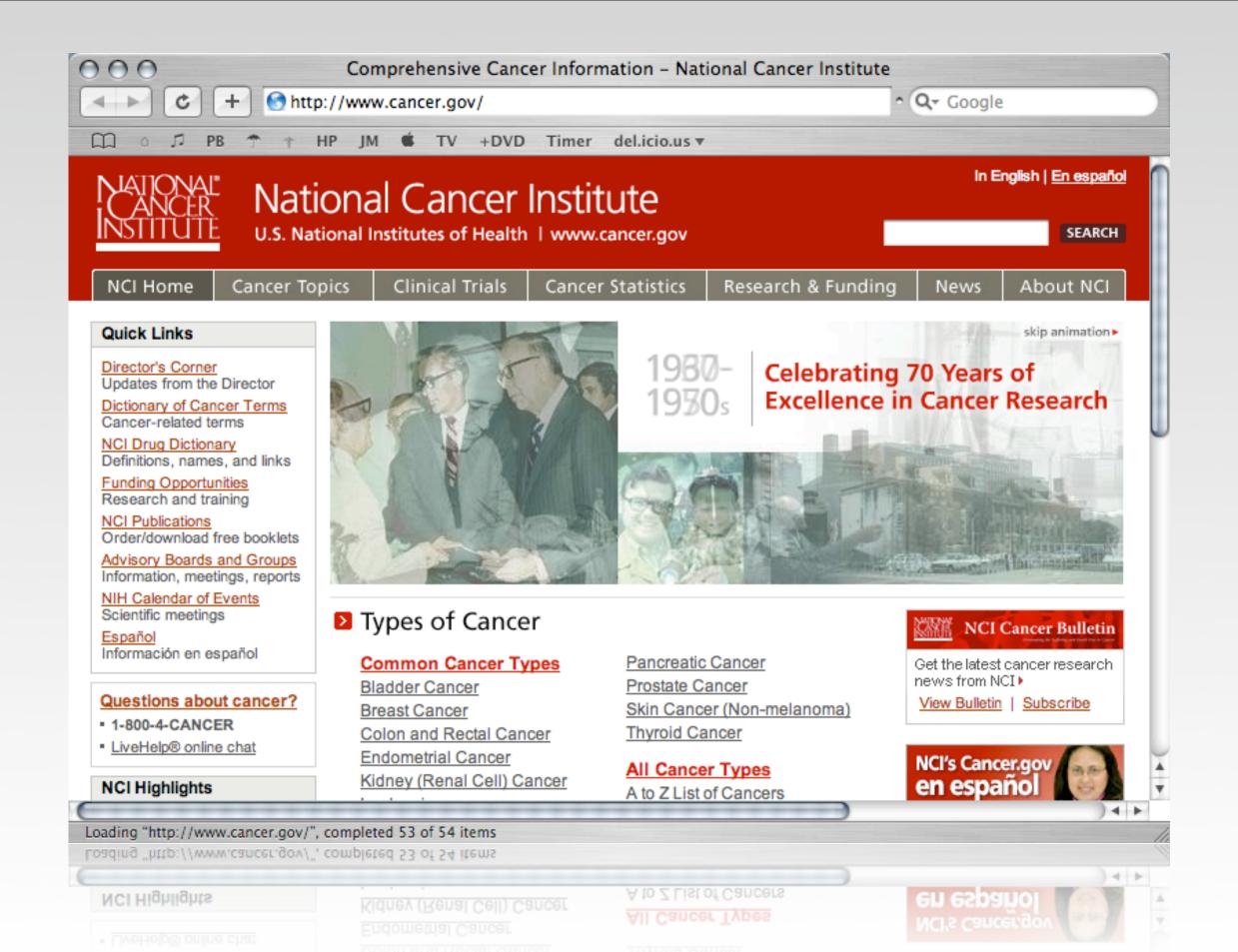


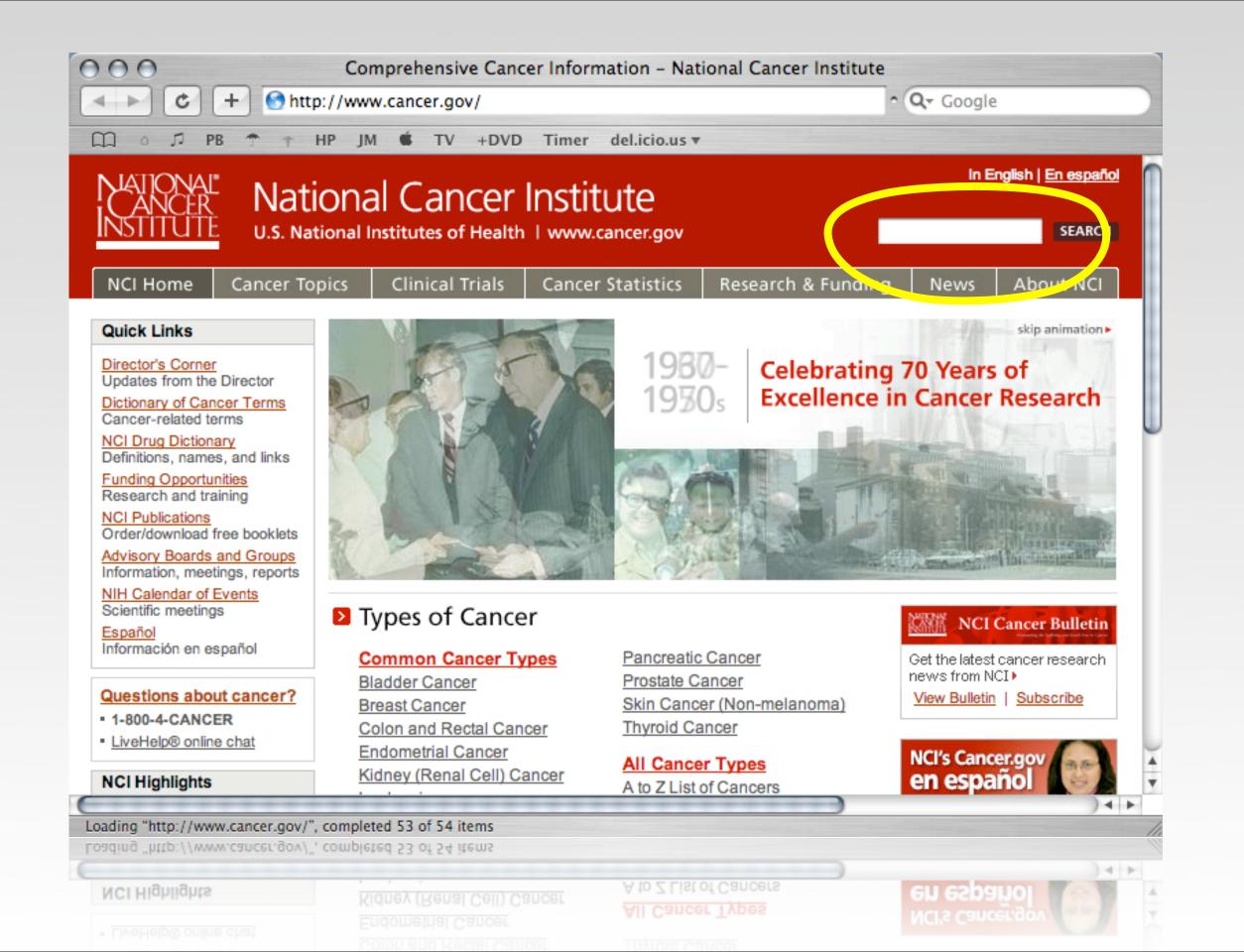


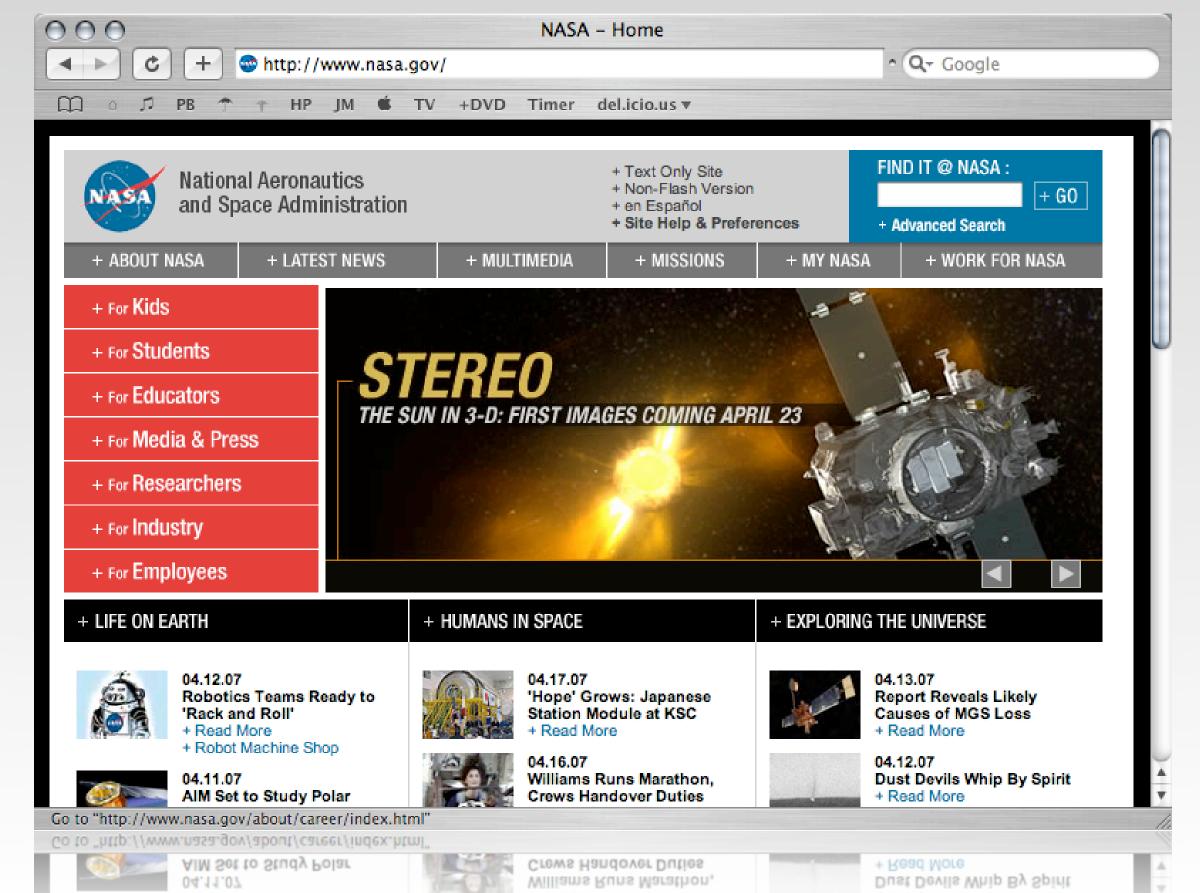
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Google

once there ...

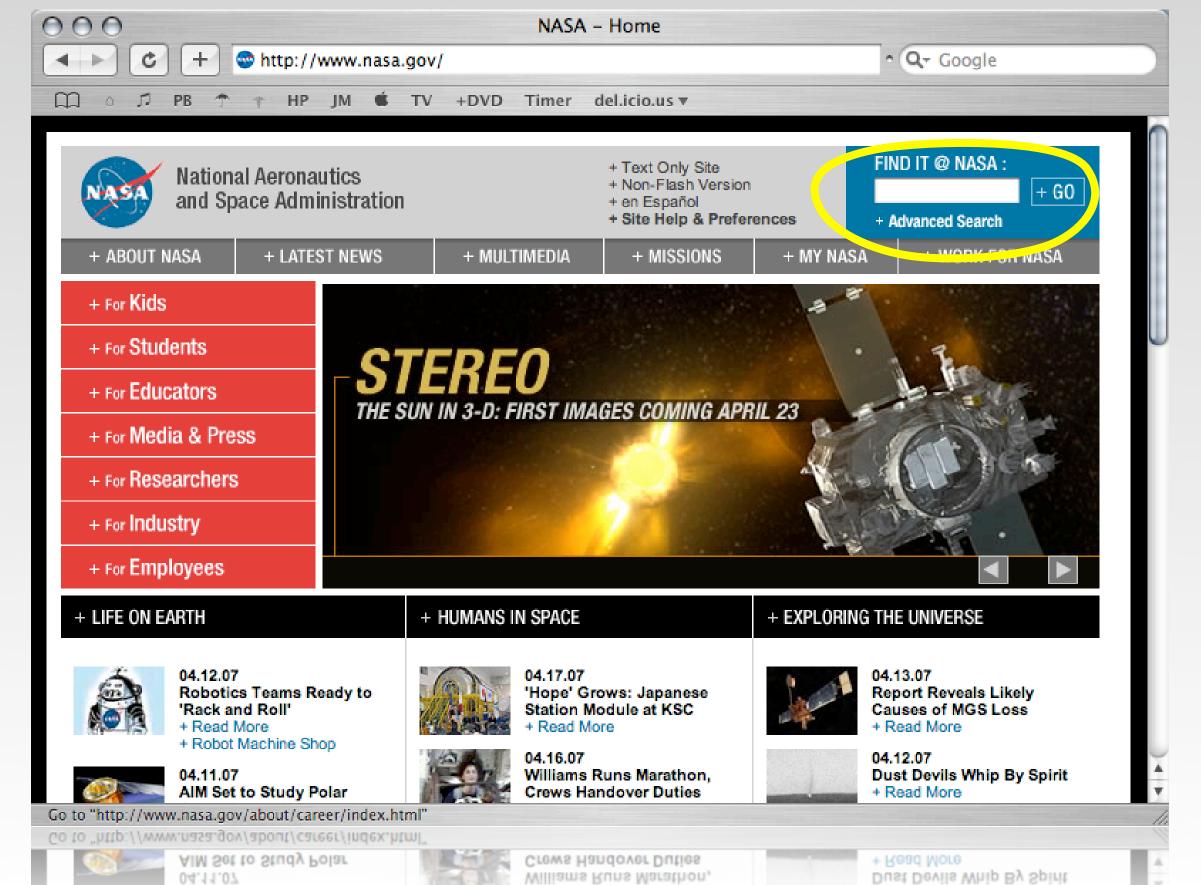






04.16.07

04.12.07





In the News

Cancer Drug Efficacy



Drug decreases gastrointestinal stromal tumor recurrence

Tai Chi Boosts Immunity



Tai Chi improves immunity to shingles virus in older adults

- ▶ More Press Releases
- ▶ eColumn: NIH Research Matters

Medical Research Issues

- NIH Reauthorization
- ▶ Blueprint for Neuroscience Research
- ▶ Research Results for the Public

■ Health Information

A-Z index of NIH health resources, clinical trials, MedlinePlus, health hotlines

□ Grants & Funding Opportunities

Grants news, applications, grants policy, NIH Guide, award data, eRA Commons, research training, research contracts, loan repayment programs, Small Business Research Programs

■ News & Events

News releases, press room, RSS, Podcasts, calendars, radio & video, media contacts, News in Health newsletter, NIH Research Matters eColumn

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Research Training & Scientific Resources at NIH

Intramural research, Human Embryonic Stem Cell Registry, scientific interest groups, library catalogs, journals, training, labs, scientific computing

■ Institutes, Centers & Offices

The individual organizations that make up the NIH

■ About NIH

Visitor info, employee directory, jobs, science education, mission,







- Employee Informati
- Información en espa

Featured this week

NCl's Cancer.gov en español







4 1



Visitor info, employee directory, jobs, science education, mission,



Tai Chi Boosts Immunity



Tai Chi improves immunity to shingles virus in older adults

- ▶ More Press Releases
- ▶ eColumn: NIH Research Matters

Medical Research Issues

- ▶ NIH Reauthorization
- ▶ Blueprint for Neuroscience Research
- ▶ Research Results for the Public

repayment programs, Small Business Research Programs

■ News & Events

News releases, press room, RSS, Podcasts, calendars, radio & video, media contacts, News in Health newsletter, NIH Research Matters eColumn

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Intramural research, Human Embryonic Stem Cell Registry, scientific interest groups, library catalogs, journals, training, labs, scientific computing

■ Institutes, Centers & Offices

The individual organizations that make up the NIH

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Cancer.gov

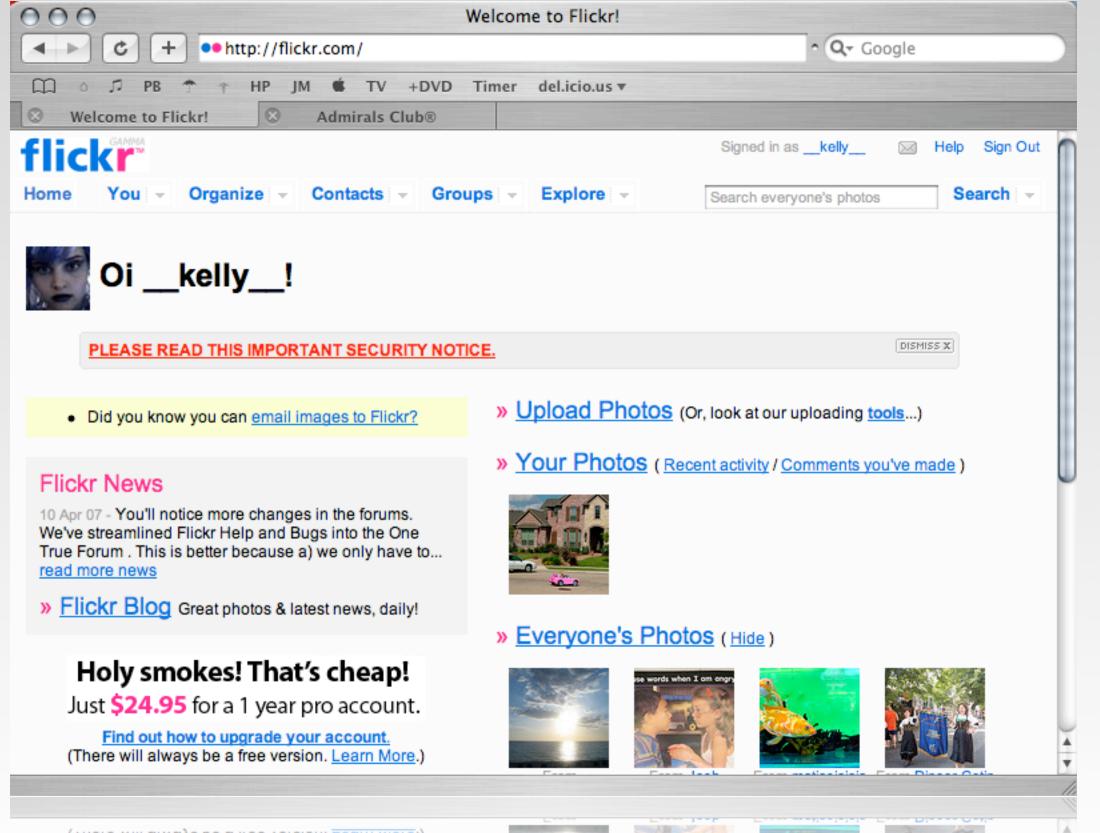
en español

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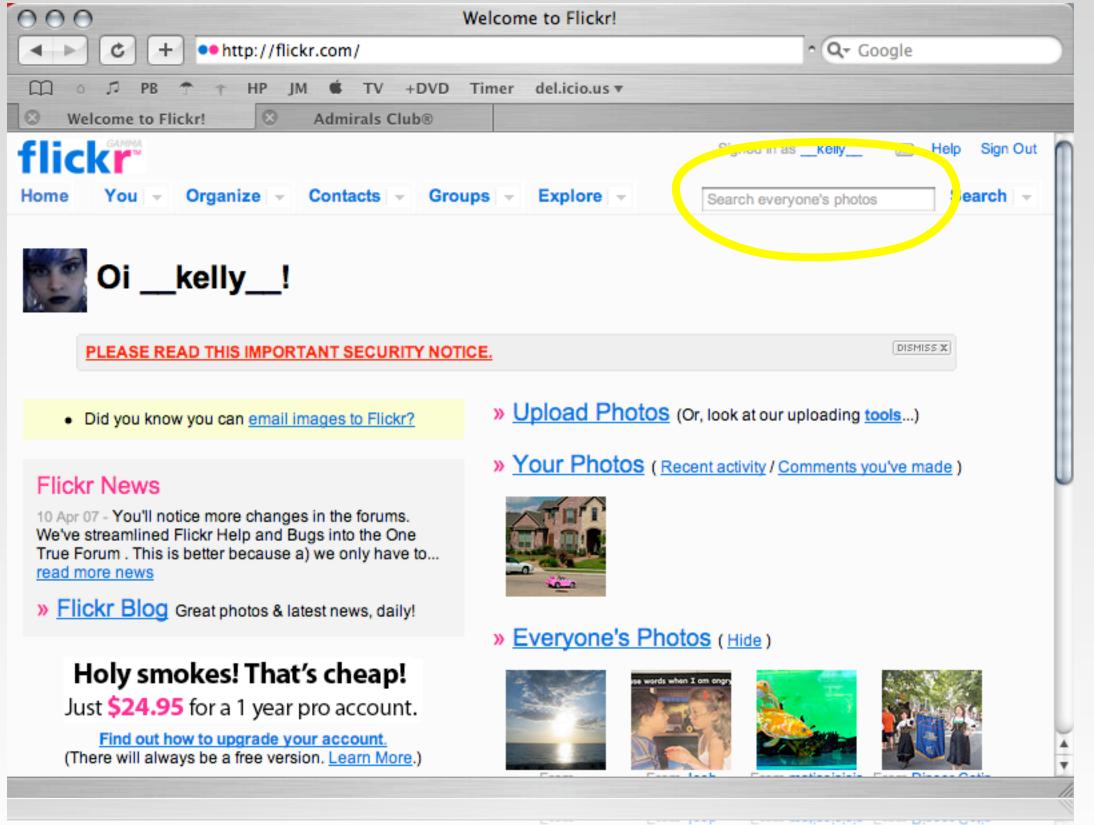
Find out how to upgrade your account. (There will always be a free version. <u>Learn More</u>.)











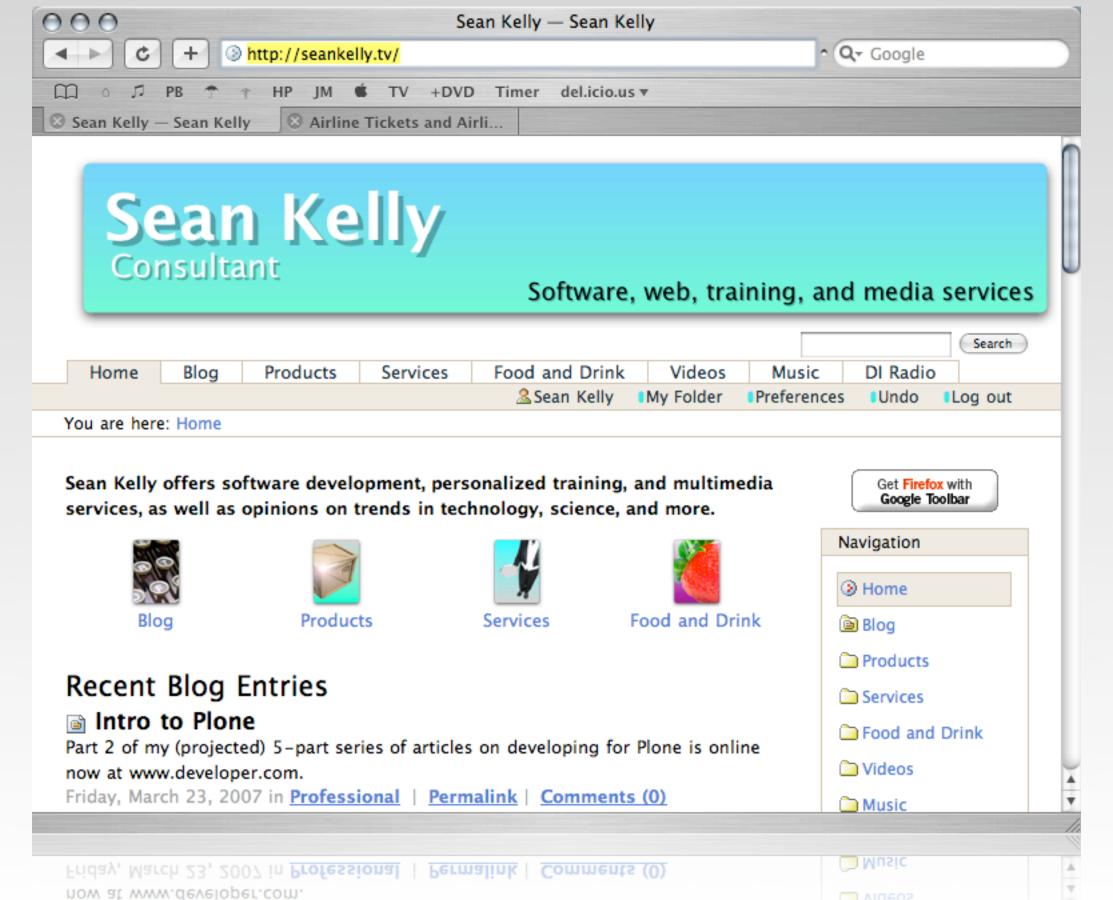
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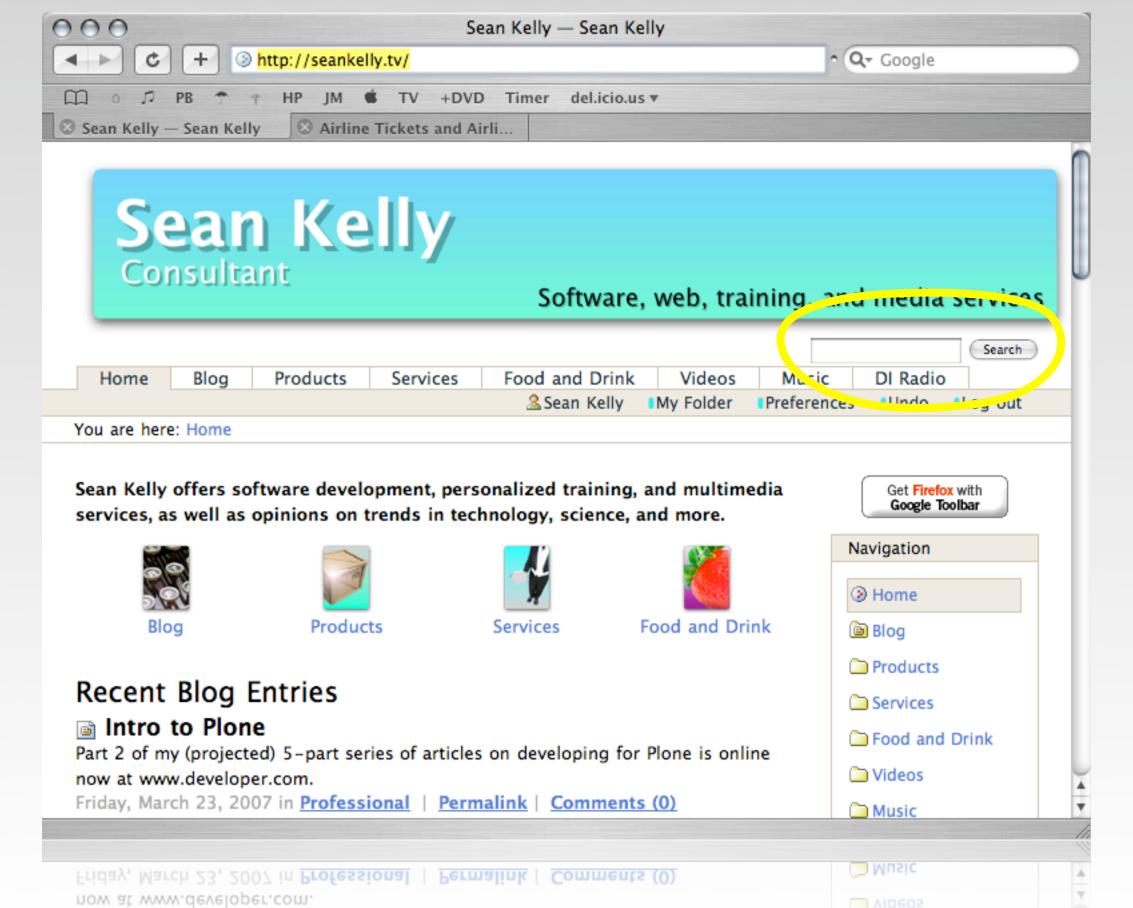






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Videos



art z of my (projected) s-part series of articles on developing for Pione is online



Network (EDRN), an initiative of the National Cancer Institute (NCI), brings together dozens of institutions to help accelerate the translation of biomarker information into clinical applications and to evaluate new ways of testing cancer in its earliest stages and for cancer risk.

Scientific Components

For Public, Patients, and Advocates

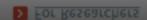
Collaborative Opportunities

Web, and email

1-800-4-CANCER

For Researchers

> Collaborative









Contact us by phone,

Web, and email

1-800-4-CANCER



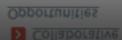
Welcome to the EDRN! The Early Detection Research Network (EDRN), an initiative of the National Cancer Institute (NCI), brings together dozens of institutions to help accelerate the translation of biomarker information into clinical applications and to evaluate new ways of testing cancer in its earliest stages and for cancer risk.

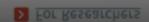
- Scientific Components
- For Public, Patients, and
- Collaborative Opportunities
- For Researchers

Network (EDRN) Program for Rapid, Independent Diagnostic Evaluation (PRIDE) for Cancer Biomarkers Notice Number: NOT-CA-07-(Posted 2007-04-04)

[Archives]

Advocates





index content from DMCC

DMCC stop generating pages

transmit content routinely

get rid of silly frame trick



Home

About EDRN

EDRN Investigators

Committees

Organ Groups

Resources

Publications

You are here: Home



Calendar



Division of Cancer Prevention



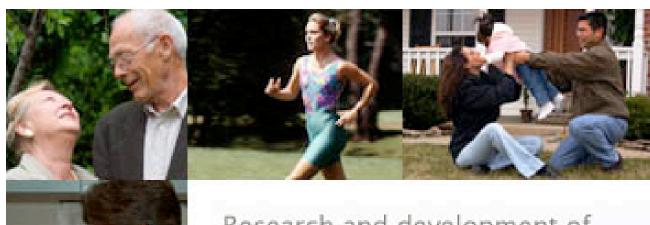
Cancer Biomarkers Research Group



EDRN Protocols



Funding Opportunities



Research and development of biomarkers and technologies for the clinical application of early cancer detection strategies

Announcement 04/05/2007

The Division of Cancer Prevention at NCI invites EDRN members to attend the NCI Workshop on Cancer Stem Cells as Targets for Cancer Prevention and Early Detection from May 14-15, 2007, in Bethesda, MD. For more information, cick here.

Click below for the announcement of the NCI Early Detection Research Network (EDRN) Program for Rapid, Independent Diagnostic Evaluation (PRIDE) for Cancer Biomarkers

Notice Number: NOT-CA-07-003



Committees

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Subcommittees

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Voting members of the Subcommittees are the members of the SC, that is the Principal Investigators in the EDRN. Co-investigators, Associate Members, and other interested parties, however, are welcome to attend Subcommittee meetings as consultants. The Chair of the SC appoints members to the Subcommittees, although SC members can express their preferences on which Subcommittee they

who what?

who what?

NCI hosted pages: Karl Krueger

DMCC hosted pages: Jeff Putnam

Announcements RSS feed: Royce Malnik

DMCC database-driven content: Peter Lin

Fixed content templates: Sean Kelly

executive editor

accept all postings edit them for uniform tone & style direct them to responsible individuals approve their submissions

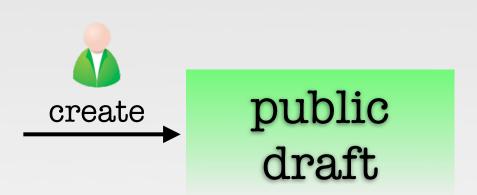
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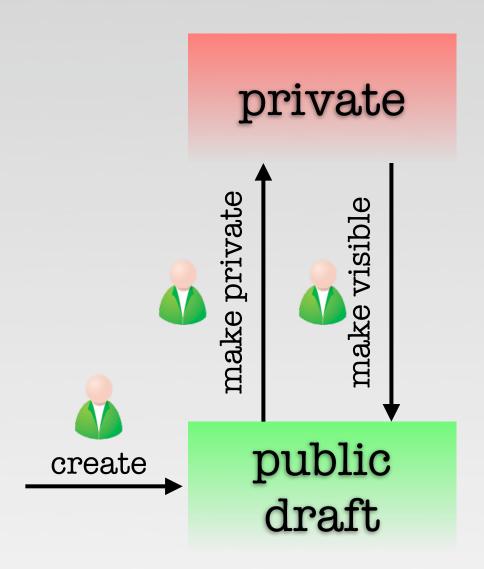


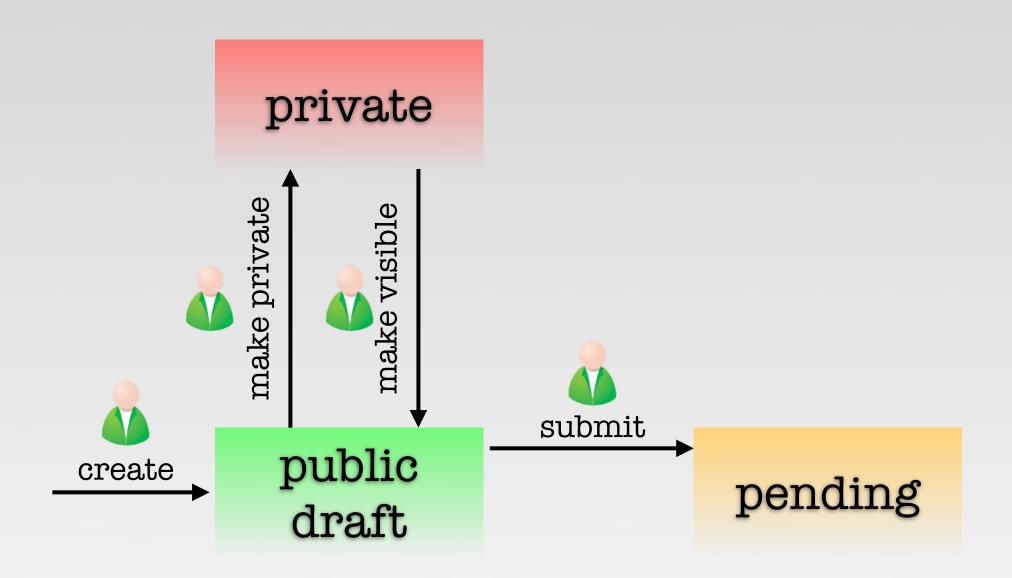
member

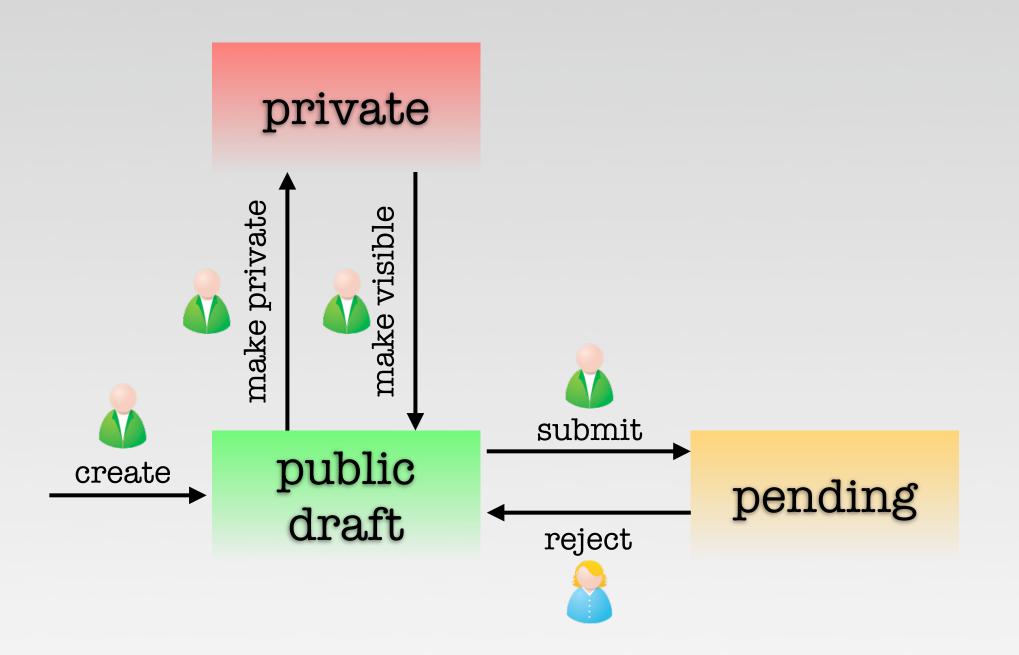


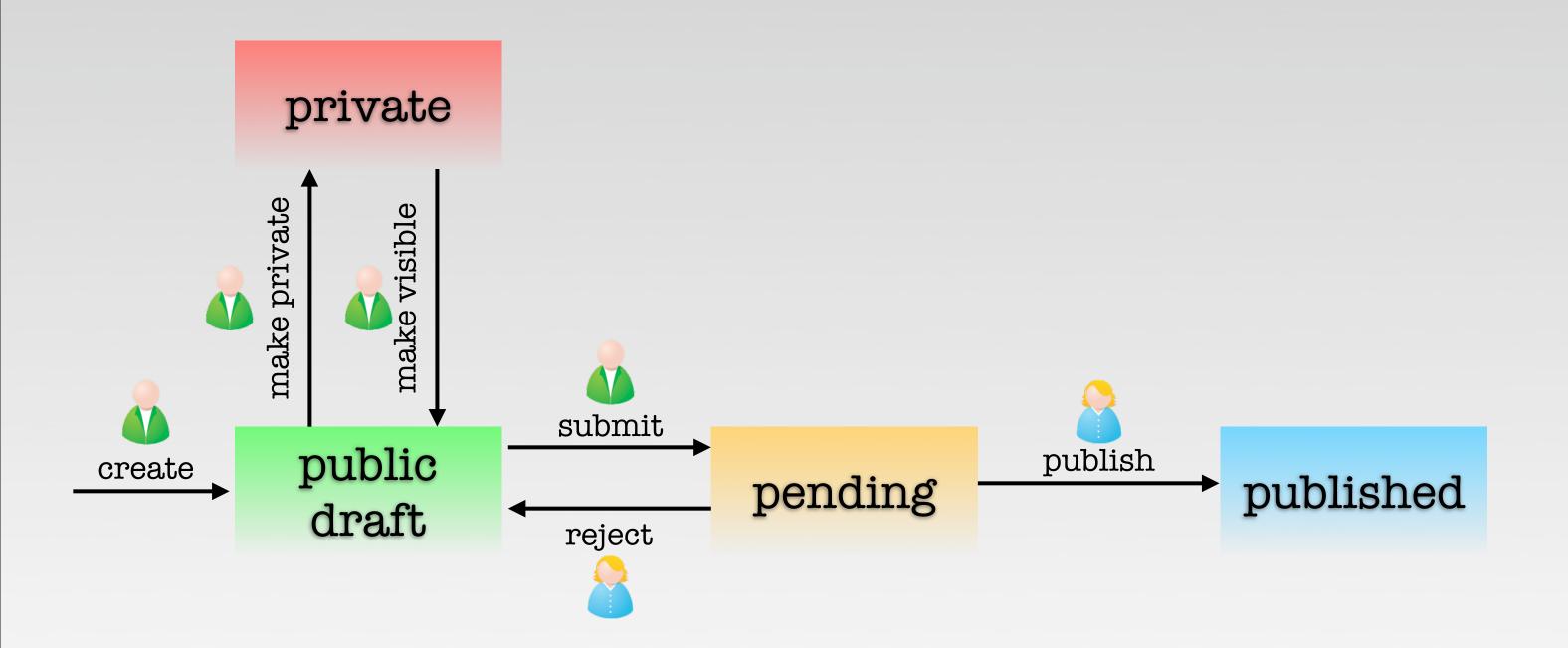
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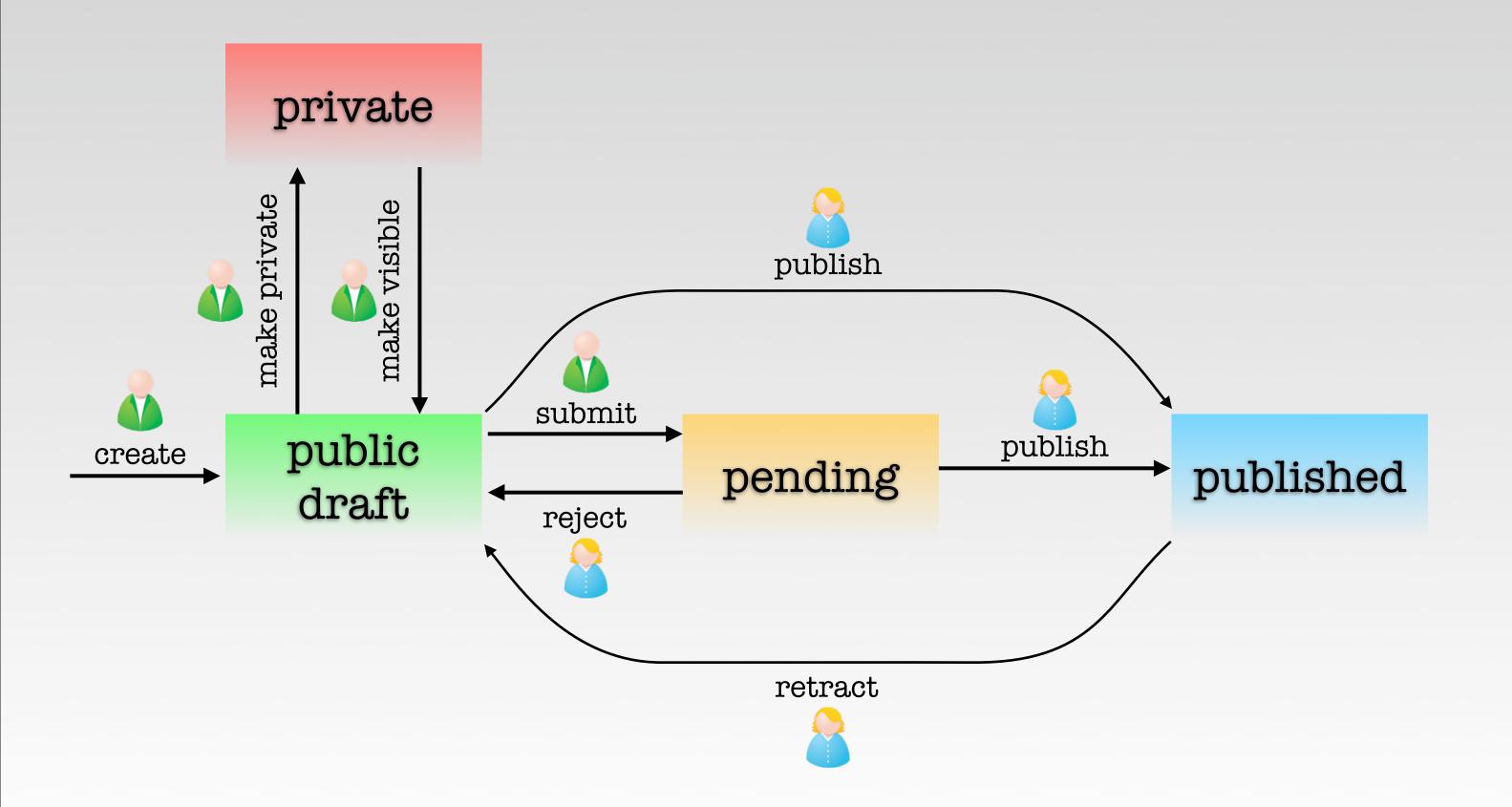












no oversight

Jeff Putnam Royce Malnik Peter Lin

Karl Krueger has "super user" permissions

who can be executive editor?



accessibility

Section 508 W3C WAI-AA

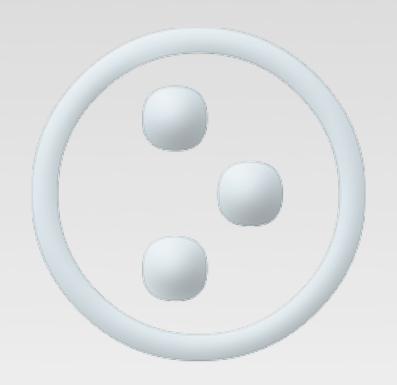
TARGET TARGET

(X)HTML for semantics only

CSS for style

access keys

graceful degradation



SECTION 🛵 508 W3C AA







ANY BROWSER

DMCC doesn't

futures

let NCI publish DMCC transmit to NCI (stop publishing)

index content

add search box

get a real calendar

DMCC doesn't understand RSS

once at NCI, most of RSS features turned off

use a real calendar protocol

iCal vCal

add publication workflow

add accelerator

other suggestions?

Summary

Overview
What it is
How it works
Current issues
Future directions

